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EXAMINER
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KEYS, ROSALYND ANN

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/578,874  
Filing Date: May 11, 2006  
Appellant(s): OSTROWSKI ET AL.

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Richard L. Treanor  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed April 16, 2009 appealing from the Office action mailed July, 17, 2008.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by O'Connor et al. (US 6,359,101 B1).

The instant claims are directed to a process for preparing polyether polyols wherein specific times to reach the metering rate are required. These times are disclosed in the specification as necessary to reach a steady-state operation quickly without deactivation of the catalyst.

O'Conner et al. teach the instant invention (see entire disclosure, in particular column 6, lines 19-53; column 7, line 10 to column 15, line 48; note (3) under Table 3; and Tables 1-6).

**(10) Response to Argument**

The Appellants submit that the Examiner has not satisfied the initial burden to establish a prima facie case of anticipation because the Examiner is requiring the

Appellant to read the entire disclosure and find some basis for the anticipation rejection rather than showing where O'Connor anticipates the process of Appellants claims.

The Examiner disagrees. Although the Examiner does reference the entire disclosure in the office action mailed November 27, 2007, the Examiner also points to particular sections of the reference which teach the claimed invention. The Examiner also provided further explanation of what is taught by O'Connor, in response to Appellants arguments, filed February 26, 2008, in the Response to Arguments section of the final rejection, mailed July 17, 2008. Thus, the Examiner believes that the initial burden of showing that O'Connor anticipates the process of Appellants claims has been met.

The Appellants submit that O'Connor did not ever continuously prepare and withdraw polyether alcohol from a filled reactor.

This submission should not be persuasive because O'Connor does teach continuous preparation and withdrawal of the polyether from a filled reactor. See for example column 10, lines 31-38. There O'Connor teaches that when compounds (i) to (viii) are used as first starters in a continuous process, a portion of them (i.e. usually less than 20% by weight of the total weight added) may be initially added with the DMC catalyst before continuously adding epoxide and the remainder of the first starter. Also in column 14, lines 26-32 O'Connor teaches that this invention is an improvement over the patented ARCO continuous process technology, wherein using one of the more active diols such as cyclohexanedimethanol or 2-ethyl-2-butyl-1, 3-propanediol the catalyst can be activated and then additional DMC catalyst, propylene oxide, water or

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propylene glycol could be fed into the reactor continuously while product is continuously removed. It is taught that with the more active diols and the linear diols, a 1 reactor CSTR process is possible (see column 14, line 45-48). Initiate, then feed PO, catalyst and starter while simultaneously removing product (see column 14, line 49 and 50).

The Appellants submit that O'Connor's experimentation involved a single reactor batch process as indicated in the examples supporting Table 6 and that an adequate description of a process for continuous preparation of polyether alcohols cannot be found anywhere in O'Connor.

This submission should not be persuasive because a prior art disclosure is not limited to its working examples or to its preferred embodiments, but must be evaluated for what it teaches those of ordinary skill in the art. Merck & Co. Inc. v. Biocraft Labs. Inc., 874 F.2d 804, 807, 10 USPQ2d 1843, 1846 (Fed. Cir. 1989); In re Fracalossi, 681 F.2d 792, 794 n.1, 215 USPQ 569, 570 n.1 (CCPA 1982); In re Lamberti, 545 F.2d 747, 750, 192 USPQ 278, 280 (CCPA 1976); In re Boe, 355 F. 2d 961, 965, 148 USPQ 507, 510 (CCPA 1966). In the instant case, O'Connor teaches that their invention is applicable to batch as well as continuous processes (see column 3, lines 49-56). See also the claims, wherein O'Connor claims both continuous processes (claims 1-9 and claims 12-20) as well a batch processes (see claims 23 and 26).

The Appellants submit that O'Connor is not describing a process for the continuous preparation of polyether alcohols by reacting alkylene oxides and H-functional starter substances in the presence of a DMC catalyst wherein the time, rate and order of adding alkylene oxide, starter substance, and DMC catalyst and

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withdrawing product is controlled as Appellants claim 1 requires. The Appellants submit that O'Connor does not teach persons of ordinary skill in the art how to carry out and maintain such a continuous process. The Appellants submit that undue experimentation would have been required to do what O'Connor broadly suggests and that O'Connor's non-enabling disclosure cannot anticipate Applicants claims.

This submission should not be persuasive because as discussed above O'Connor teaches that their invention is applicable to batch as well as continuous processes (see column 3, lines 49-56). Thus, one having ordinary skill in the art at the time the invention was made would have a reasonable expectation that the data obtained in Tables 1-6 are applicable to batch as well as continuous processes. Thus, for example the 25 minutes it took to reach initial exotherm and the 55 minutes to PO completion obtained for 2-butyl-2-ethyl-1, 3-propanediol in Table 2 would be applicable for both batch and continuous operation. Further, the ability to control exotherm and achieve steady state conditions by PO addition should be applicable for batch and continuous processes (see column 13, lines 14-39; column 14, lines 56-63; column 15, lines 3-10; and column 16, lines 7-11).

The Appellants submit that the Examiner employs impermissible hindsight and points to Appellants own Specification as support for rejecting the patentability of the process Appellants claim.

This submission should not be persuasive because the Examiner used Appellants specification to determine Appellants requirements for when a steady state is

achieved. It is appropriate to use the specification to determine what Appellants intends a term to mean.

The Appellants submit that the Examiner has not established that O'Connor would have enabled a person having ordinary skill in the art to make and use the "possibility" of a process for the continuous preparation of polyether alcohols by reacting alkylene oxide and active H-functional starter substance in the presence of a DMC catalyst without undue experimentation.

This submission should not be persuasive because as pointed out earlier the process of O'Connor is applicable to both batch and continuous processes (see for example column 3, lines 49-56). Also in column 10, lines 31-38 O'Connor gives guidance on the use of compounds (i) to (viii) as starters in a continuous process. Further, in column 14, lines 26-51 O'Connor teaches that their process is an improvement over the patented ARCO continuous process technology and then gives guidance on how to carry out such a process. Further, claims 1-9 and 12-20 are directed to a continuous process.

The Appellants submit that the Examiner has not explained why the claimed metering rates are inherently taught by O'Conner.

This submission should not be persuasive because as the Appellants pointed out on page 4, lines 15-21 of the instant specification when times to reach the metering rates in steps b) and c) are less than those specified damage to the catalyst occurs. The Appellants also disclose that when the times specified are exceeded, it takes a long time for conditions in the reactor under which the target product is produced in a



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consistent quality to be reached, so that out of specification product is obtained in the start-up phase. A review of the teachings in Table 6 of O'Connor shows for example when dipropylene glycol is used as a starter, a Shell DMC catalyst is used as the catalyst, and the PO/S ratio is 6.2, then O'Connor was also able to reach initial exotherm in 7 minutes, reach peak exotherm in 7 minutes, and PO completion in 2 hours; when CHDM is used as a starter, a Shell DMC catalyst is used as the catalyst, and the PO/S ratio is 2.48, then O'Connor was also able to reach initial exotherm in 4 minutes, reach peak exotherm in 4 minutes, and PO completion in 24 minutes; when trimethylol propane is used as a starter, 120 ppm of a Shell DMC catalyst is used as the catalyst, and the PO/S ratio is 16.2, then O'Connor was also able to reach initial exotherm in 14 minutes, reach peak exotherm in 31 minutes, and PO completion in 1 hour and 52 minutes, etc. These results are an indication that O'Connor was able to quickly achieve steady-state without damage to the catalyst (see column 13, lines 14-40). Thus, based upon these results the Examiner concluded that the claimed metering rates were inherently taught by O' Connor. Where Appellants claim a process and the process of the prior art is the same as that of the claim but a certain characteristic is not explicitly disclosed by the reference does not render the process patentable. Thus the claiming of a new or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. *In re Best*, 562 F.2d 1252, 1255 n.4, 195 USPQ 430, 433 n.4 (CCPA 1977).

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Rosalynd Keys/

Primary Examiner, Art Unit 1621

Conferees:

**/James O. Wilson/  
Supervisory Patent Examiner, AU 1624**

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